We claim:

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1 1	. A	n apparatus,	comprising
1 1		ii apparatus,	Compilan

- a table containing a plurality of entries, each entry including a frequency field and a voltage field; and
- a register coupled to the table and having a selection field to select one of the plurality of entries.
- 1 2. The apparatus of claim 1, wherein the register also has a limit field to specify
- 2 how many entries are selectable.
- 1 3. The apparatus of claim 2, wherein the selection field is a read-write field and
- 2 the limit field is a read-only field.
- 1 4. The apparatus of claim 1, wherein the frequency field includes a processor
- 2 clock frequency indicator.
- 1 5. The apparatus of claim 4, wherein the processor clock frequency indicator is a
- 2 multiplier to be used with a phase locked loop circuit to generate a processor clock
- 3 frequency.
- 1 6. The apparatus of claim 1, wherein the voltage field includes a processor
- 2 operating voltage identifier.

- 7. The apparatus of claim 1, wherein the table is disposed in non-volatile memory.
- 1 8. The apparatus of claim 7, wherein the table includes of least two entries.

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- 9. A computer system, comprising:
- a clock generator to selectively output a clock signal at any of a plurality of selectable processor clock frequencies;
- a power supply to selectively output any of a plurality of selectable processor operating voltages;
- a table coupled to the clock generator and the power supply and containing a

 plurality of entries, each entry including a frequency field and a voltage

 field; and
- a register coupled to the table and having a selection field to select one of the plurality of entries.
- 1 10. The system of claim 9, wherein the register also has a limit field to specify how
- 2 many entries are selectable.
- 1 11 The system of claim/10, wherein the selection field is a read-write field and the
- 2 limit field is a read-only field.
- 1 12. The system of flaim 9, wherein the frequency field includes a processor clock
- 2 frequency indicator.





- 1 13. The system of claim 12, wherein the processor clock frequency indicator is a
- 2 multiplier to be used with a phase locked loop circuit to generate the processor clock
- 3 frequency.
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- 1 14. The system of claim 9, wherein the voltage field includes a processor operating
- 2 voltage identifier.
- 1 15. The system of claim 9, wherein the table is sposed in non-volatile memory.
- 1 16. The system of claim 15, wherein the table includes at least two entries.
- 1 17. A method, comprising:
- writing into a selection field of a register;
- using a content of the selection field to select one of a plurality of entries in a
- table, each entry having a frequency field and a voltage field.
- 1 18. The method of claim 17, wherein a content of the frequency field indicates a
- 2 processor clock frequency.
- 1 19. The method of claim 17, wherein a content of the voltage field identifies a
- 2 processor operating voltage.
- 1 20. The method of claim 1/7, further comprising:
- 2 using a content of a limit field in the register to determine how many entries are
- in the plurality of entries.



- 1 21. The method of claim 17, further comprising:
- 2 using a content of the frequency field of the selected one of the plurality of
- entries to control an operating frequency of a processor clock.

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- The method of claim 21, wherein using includes using the content of the
- 2 frequency field as a multiplier to control an output frequency of a phase locked loop.
- 1 23. The method of claim 17, further comprising:
- 2 using a content of the voltage field of the selected one of the plurality of entries
- to control an operating voltage to a processor.
- 1 24. The method of claim 23, wherein using includes using the content of the voltage
- field to select from a plurality of operating voltages to the processor.
- 1 25. The method of claim 17, wherein a content of the frequency field and a content
- of the voltage field in a selected entry of the table are matched to produce a
- 3 combination of processor clock frequency and processor operating voltage that are
- 4 operable in an associated processor.
- 1 26. A machine-readable medium having stored thereon instructions, which when
- 2 executed by a processor cause said processor to perform:
- determining a desired combination of processor clock frequency and processor
- 4 operating voltage; and

	5		writing to a register to select the desired combination of processor clock
	6		frequency and processor operating voltage from a table.
	,		
	1	27.	The medium of claim 26, further comprising:
duf	P 12		reading from the register to determine the current combination of processor
Sup	3		clock frequency and processor operating voltage.
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	1	28.	The medium of claim 26, further comprising:
	2		reading from the register to determine how many combinations of processor
154, 4 12 154, 4 12	3		clock frequency and processor operating voltage are available to be
H. Hann of Brief II B	4		selected.
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12	1	29.	The medium of claim 26, wherein:
10 1 10 10 10 10 10 10 10 10 10 10 10 10	2		determining a desired combination is based on at least one of:
	3		a performance goal;
	4		a power consumption goal; and
	5		operating characteristics of the processor.